

FACT SHEET/STATEMENT OF BASIS
GENERAL STORM WATER PERMIT FOR CONSTRUCTION ACTIVITY
CONNECTED WITH SINGLE LOT HOUSING PROJECTS
ALSO REFERRED TO AS THE "COMMON PLAN PERMIT"
UPDES PERMIT No. UTRH00000

GENERAL PERMIT INFORMATION: The development of this new Storm Water Permit for Construction Activity for a Single Lot House Building Project, with UPDES Permit No. UTRH00000 (Permit) was prompted by feedback from storm water regulated Municipalities (MS4s) and the construction industry sector due to the complexity and size of the existing Construction General Permit (CGP) as it applied to smaller residential housing projects. The CGP, which previously was the permit for all construction projects, is over 100 pages including the appendices. The Storm Water Pollution Prevention Plan (SWPPP) template for the CGP alone is 74 pages in its blank unused form presented as guidance to assist those in preparation of a SWPPP (it may change in size, as it is modified from time to time). The CGP was designed to handle all construction projects large and small, and for every aspect of construction from construction of pipelines, roads, bridges, solar and wind farms for electrical generation, large water impoundment and conveyance projects, commercial, industrial, and residential development, and all other types of building construction. The largest numbers of permits are issued for projects engaged in residential housing. These projects range from large developer/builders to house builders (not including development) to owners that build only one home in their lifetime. Larger general contractors and developers have resources and staff with the knowledge, experience, and education to address the detail, complexities, and requirements of the CGP. The small general contractors and owner builders do not necessarily have the broad experience or resources, nor do they generally have size and complexity issues with their smaller scale projects.

This new streamlined and condensed 19-page Common Plan Permit for Construction Activity at Single Lot House Building Projects, basically contains the same regulatory requirements as the existing CGP, but with fewer details and precise directions about exactly how each step must take place. Overall it is simplified for single lot housing projects, but still contains the provisions and responsibilities to protect water quality.

REQUIREMENTS CONTAINED IN THE PERMIT: The basis of the permit is taken from 40 CFR 450 (The Construction and Development Point Source Category). All elements found in 40 CFR 450 are found in the permit, although not all is word for word. The permit also has elements of control that are not found in 40 CFR 450, but that are incorporated because they are activities supportive of 40 CFR 450 and program experience has deemed it necessary to include for clarity and performance.

This permit is streamlined and condensed by eliminating requirements for procedural elements and focusing on practices for the preservation of water quality. This is a universal permit that does not specifically address unique issues related to any particular watershed. It covers all of Utah. If there is a watershed with specific problems that are not addressed in this permit, this permit may be revoked or rescinded when the shortcomings of this permit comes to light. This permit is designed to be protective

of water quality for watersheds that do not have a particular sensitivity to pollutants related to construction activities.

If additional information becomes available indicating a permitted project is causing or contributing to a violation of water quality, then a permittee's coverage under this permit may be re-evaluated, which may result in revocation of the permit, and or the requirement to get coverage under an individual permit or another general permit. New information can be, but is not limited to, the development of a new TMDL for the area of permit coverage, discovering the permitted project site is violating an existing TMDL, discovering properties about the site or the construction process that was not known before construction commenced, or other. DWQ does not evaluate information in an NOI before the permit is issued. All information that is required to be submitted to DWQ before the project commences is in the NOI. In the NOI the permittee must identify the water body and if the water body is high quality or impacted. After the permit is issued, with that information DWQ may be able to screen permit coverages that fall in watersheds where TMDLs have been developed having impacts related to storm water, sediment, or nutrients. If this were to be discovered DWQ has a few options. DWQ may require an individual permit, or develop a general permit that addresses the pollutants on the site in place of this permit. DWQ may choose to modify the Common Plan permit to address the impacts to the watershed and issue it as an individual permit specific for that project site or as a general permit specific for the watershed. There are other options that DWQ may decide to take depending on the circumstances and conditions that must be addressed. DWQ believes that future issues related to impacted or high quality watersheds can be addressed starting with this universal permit.

Part I: Part I of the permit contains explanations concerning which projects may be covered by this permit, what discharges are allowed, and generally the mechanics of how to get covered, how to renew, and how to terminate coverage. The contents of Part I for the most part are requirements that allow DWQ to identify and control which activities are covered under this permit. Part 1.9 is a requirement to post information so DWQ can more easily check compliance.

Part II: The permit requirements pertaining to storm water and water quality are found in Part 2 of the permit. Controls for stockpiles of materials, perimeter controls, and inlet protection are details in the requirements beyond 40 CFR 450, but which clarify and provide details concerning activities related regulations in 40 CFR 450. Many parts of Part II were transposed word for word from 40 CFR 450. Most of 40 CFR 450 is represented in Part II of the permit (the portion of 40 CFR 450 that is not in Part II is in Part IV).

In the paragraph that addresses stabilization found in 40 CFR 450(b), after stating requirements EPA says, "In arid, semi-arid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority." Utah is the second most arid state in the nation, Utah has many arid and semi-arid areas. The general stabilization requirements found in 40 CFR 450(b) are unrealistic for arid, semi-arid, and drought-stricken areas in Utah, of which the EPA has implied. Utah DWQ has wrestled with stabilization requirements in these areas for a number of years.

Undisturbed soil surfaces in arid and semi-arid areas naturally have less of the stabilizing effects from vegetation than other wetter areas, because wetter areas sustain a higher density of vegetative growth. It is an obvious in arid areas that the lack of climatic moisture generally causes less dense vegetative cover. Because of this nearly all areas of Utah that are located in arid or semi-arid areas naturally have significant erosion and sediment transport during heavy rain events. Watersheds in these areas naturally flow heavy with sediment after storm events that produce runoff. A factor exacerbating already increased erosion in arid and semi-arid areas is from construction activity when soils are disturbed, even if top soil is preserved, re-establishment of vegetation without irrigation takes much longer, even years, than compared to other areas with greater climatic moisture. However, moderating the increased erosion effect for both situations (naturally occurring and construction site erosion) is the fact that due to the nature of the climate in arid areas, storms causing runoff are much more infrequent than other areas.

An interesting observation seen in developed areas located in arid and semi-arid climates in southern Utah is that development tends to stabilize surfaces more than what naturally occurs in surrounding undeveloped areas.

To summarize and state the problem for arid and semi-arid areas, construction activity does exacerbate erosion and sediment transport, but erosion is significantly high already. Vegetative stabilization is very difficult to establish (permanently or temporarily) and usually does not occur for several months or even years no matter what the permittee does unless irrigation is used. The unnatural sediment load due to construction activities in arid and semi-arid areas is not as significant as it would be in wetter climates because the background load is high. Countering the increased combined load, construction and background, developed areas in arid and semi-arid climates have lower loads than background, loads that are more comparable to wetter climates (due to the irrigation of lawns and gardens, but also to pavement and other structures covering the soil).

The strategy for controlling erosion and sediment transport in arid and semi-arid areas must be different than other areas in Utah because of the differences in erosion and sediment transport under natural (background) conditions and the difficulties re-establishing vegetation. Erosion and sediment transport in arid and semi-arid areas should be controlled, but not as rigidly as in other areas. The standard structural controls, perimeter controls and velocity control devices, must remain as in current permit requirements. Due to the difficulty of vegetative stabilization in arid areas and the reduced sensitivity to sediment transport, stabilization efforts will be modified in this permit.

Stabilization on visually flat areas will not be required. Also for very mild slopes (up to roughly 8 percent) stabilization will not be required but velocity dissipation devices must be placed across all storm water drainages frequently enough to remove the energy and sediment causing erosion. Non-vegetative stabilization is required on all other sloped areas increasing the robust nature of stabilization commensurately with increasingly steeper slopes. Seeding is required on all areas that are not covered with structural elements (building or paving) or that are engineered or intended for structural purposes (like graveled parking or dirt roads). Disturbed areas on projects outside of populated areas and where

no irrigation is available must be reclaimed with a seed mix of plants indigenous to the area. Velocity dissipation devices may be permanent or temporary. If velocity control devices are intended for temporary use until vegetation is re-established after the permit is terminated they must be biodegradable.

Minimizing disturbances and preserving top soil are significant for avoiding the problem of maintaining the degree of soil stabilization that occurs in arid and semi-arid areas. There are low impact rural communities that have been and are being developed in Southern Utah where soil disturbances are or have been very minimal. The finished product (a house ready for occupancy) does not need re-vegetation because wholesale re-grading of the site did not occur and soil disturbance did not extend more than 4 to 6 feet beyond the house footprint or road for the development. This kind of development likely will not be a model for urban areas. Presently most urban areas grade and irrigate (planned irrigation for the final product). The quantity of irrigation currently used for lawns and gardens in arid areas is challenging for the future for Utah. Re-vegetation in arid and semi-arid areas where irrigation is not available presents an insurmountable dilemma for the construction industry where it must be accomplished by termination of the permit. Many projects up to now in arid areas have had difficulty and challenges to comply with these permit requirements.

Part III: Part III contains requirements for the permittee concerning self-inspection reports. Only the essential elements that are deemed necessary for effective inspection of the site are included in this section, plus requirements for the inspection report. An inspection report form is not included. The list of elements required to be in the inspection report will dictate. The permittee may submit any format for a report form.

Part IV: Part IV contains the requirements for a SWPPP and what must be contained in a SWPPP. The requirements were paired down and streamlined from the requirements for a SWPPP in the CGP.

Part V: Part V contains the standard conditions for all UPDES permits issued by DWQ for the State of Utah. The requirements in Part V come from Utah Administrative Code R317-8.

Part VI: Part VI are definitions.

PERMIT DURATION

As stated in *UAC R317-8-5.1(1)*, UPDES permits shall be effective for a fixed term not to exceed five (5) years.

DRAFTED BY: Harry Campbell, P.E., CPESC, Division of Water Quality, February 24, 2015